

1 **ABSTRACT OF THE INVENTION**

2 The present invention relates to a process of forming a phase-change memory. A
3 lower electrode is disposed in a first dielectric film. The lower electrode comprises an
4 upper section and a lower section. The upper section extends beyond the first dielectric
5 film. Resistivity in the upper section is higher than in the lower section. A second
6 dielectric film is disposed over the first dielectric film and has an upper surface that is
7 coplanar with the upper section at an upper surface.